

IN THE CLAIMS

Please amend the presently pending claims as follows:

1. (Currently Amended) Helical antenna including at least one helix formed by at least two radiating wires, each of them being connected by coupling to an associated parasitic wire by one first end,

said radiating wires and parasitic wires being parallel and having a same length,
wherein each of said parasitic wires ~~are~~ is narrower than ~~or equal in width to~~ said associated radiating wires and the ratio between the width of each of said parasitic wires and the width of said associated radiating wire is less than or equal to 0.15,
and

wherein each of said parasitic wires is farther in a direction perpendicular to the axis of said parasitic wires from said associated radiating wire than from at least one of said other radiating wires.

2. (Cancelled).

3. (Previously Presented) Helical antenna according to claim 1, wherein said radiating wires and said at least one parasitic wire are printed on a substrate.

4. (Previously Presented) Helical antenna according to claim 1, wherein each of said parasitic wires is connected to the ground.

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Previously Presented) Helical antenna according to claim 1, wherein one end of each of said parasitic wires is connected by a conductive connection to one of the ends of said radiating wire with which said parasitic wire is associated.

11. (Previously Presented) Helical antenna according to claim 1, wherein one end of each of said parasitic wires is connected by coupling to one of the ends of said radiating wire with which said parasitic wire is associated.

12. (Previously Presented) Helical antenna according to claim 3, wherein said radiating wires are printed on a first surface of a substrate and wherein said parasitic wires are printed on a second surface of said substrate.

13. (Previously Presented) Helical antenna according to claim 12, wherein at least one parasitic wire and one radiating wire adjacent to said radiating wire with which said parasitic wire is associated cross over one another.

14. (Previously Presented) Helical antenna according to claim 10, wherein the end of said radiating wires not connected to a parasitic wire is connected to a feedline of a power supply circuit.

15. (Previously Presented) Helical antenna according to claim 1, wherein at least one of said helices is a quadrifilar helix, including four wires.

16. (Previously Presented) Helical antenna according to claim 1, wherein said radiating wires forming a helix are all the same size and in that said parasitic wires are all the same size.

17. (Previously Presented) Helical antenna according to claim 1, wherein at least one of said radiating and/or parasitic wires is formed by at least two segments, in which the angles of wrap of at least two of said segments are different and determined randomly or pseudo-randomly using global optimisation means.

18. (Previously Presented) Helical antenna according to claim 1, wherein at least one of said radiating and/or parasitic wires has a variable width, varying regularly and consistently between a maximum and a minimum width.

19. (Cancelled)

20. (New) Helical antenna including at least one helix formed by at least two radiating wires, each of them being connected by coupling to an associated parasitic wire by one first end,

said radiating wires and parasitic wires being parallel and having a same length, which is substantially different from a multiple of a wavelength corresponding to a mean frequency of a transmission band of said antenna, divided by 4,

wherein each of said parasitic wires is narrower than or equal in width to each of said radiating wires, and

wherein each of said parasitic wires is farther in a direction perpendicular to the axis of said parasitic wires from said associated radiating wire than from at least one of said other radiating wires.

21. (New) Helical antenna including at least one helix formed by at least two radiating wires, each of them being connected by coupling to an associated parasitic wire by one first end,

said radiating wires and parasitic wires being parallel and having a same length,

wherein respective ends of said radiating wires and parasitic wires are situated in two parallel planes, which are separated by a distance equal to an axial length of the antenna,

wherein each of said parasitic wires is narrower than or equal in width to each of said radiating wires, and

wherein each of said parasitic wires is farther in a direction perpendicular to the axis of said parasitic wires from said associated radiating wire than from at least one of said other radiating wires.